

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006881**Date Inspected:** 24-May-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Zhi jiang/ Li Xin Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

Bay#2

This QA inspector performed a visual inspection (VT) on Segment 1AAE. Observed following discontinuity

1. Six (06) cracked welds found by QA in visual inspection, confirmed by Magnetic particle Testing (MT), on the segment Welds. Weld numbers are designated as Seg2E-470, Seg2E-409, Seg2D-073, Seg2D-076, Seg2D-078, and Seg2C- 083. ZPMC repaired the cracked welds and confirmed by MT.
2. Twenty Three (23) Bulkhead Stiffeners have fillet welds wrapped on both ends of stiffener. Weld detail on drawing shows the fillet weld shall be welded both sides and not welded all around (wrapped).
3. SEG2C-152~172 and SEG2D-152~170, 192, 193. The approved drawings require a tight fit joint. The joint had been fillet welded then the weld was removed by air arc gouging resulting in base metal damage. ZPMC caulked over the gouged welds prior to Caltrans QA Inspector verification of the 2 mm tight fit requirements.
4. Segment internal stiffener Partial Joint Penetration (PJP) Welds have root openings greater than the 5mm allowed per WPS-B-T-2333-Tc-U4b f. Weld numbers are designated as Seg2E-084, Seg2E-378, Seg2E-421, Seg2E-341, Seg2E-381, Seg2E-131, Seg2E-425, Seg2E-054, Seg2E-346, Seg2E-469, Seg2E-448, Seg2E-409, Seg2E-582, Seg2E-409.
5. Weld number Seg2E-344 & Seg2E-416, which require a PJP weld with a 8 mm reinforcing fillet according to weld detail (WD90H), do not comply with the drawing. The fillet weld has not been welded. Stiffeners thickness is 28mm, is reduced to 15mm thick outside the toe of the PJP weld. This does not meet the thickness requirement on

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the segment drawing (SEG2D) and weld detail (WD90H) of the stiffener component.

6. Under cut observed on the tack welds. ZPMC rectified the discontinuity. Weld number designated as, Seg2E-482, Seg2E-483, Seg2E-449, Seg2E-057.

This QA inspector generates an incident report TL-015 for above.

Unless otherwise noted, all observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Patel,Hiranch	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer
